DIVISION OF DISABILITY AND ELDER SERVICES

BUREAU OF QUALITY ASSURANCE
1 WEST WILSON STREET
P O BOX 2969
MADISON WI 53701-2969

Telephone: 608-266-8481
FAX: 608-267-0352
TTY: 608-266-7376
dhfs.wisconsin.gov

Jim Doyle
Governor

Helene Nelson
Secretary

State of Wisconsin

Department of Health and Family Services

Date:	March 27, 2006	DDES-BQA-06-003
To:	Ambulatory Surgery Centers	ASC 01
	Facilities for the Developmentally Disabled (FDDs)	FDD 02
	Hospices	HSPC 02
	Hospitals	HOSP 03
	Nursing Homes	NH 02
From:	David Soens, Fire Authority Provider Regulation and Quality Improvement Section	
cc:	Otis Woods, Director Bureau of Quality Assurance	

Life Safety Informational Release

The purpose of this memorandum is to notify the health care provider community of common Life Safety Code NFPA 101 (LSC) items that have been cited in recent Medicare or Medicaid surveys.

The following list is a result of the Centers for Medicare and Medicaid (CMS) Federal Monitoring Surveys (FMS) for long term care (LTC) facilities. CMS has concluded fiscal year 2005 FMS activities and shared their common findings with Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin state agencies on December 16-17, 2005. Overall, the federal surveys resulted in a significant increase in deficiencies compared to the state agency survey findings. The majority of the deficiencies are being corrected by the facilities, resulting in an established precedent.

The Wisconsin Department of Health and Family Services (DHFS) is attempting to address the disparity between the federal and state survey findings by proactively notifying all providers, regulated by the Life Safety Code, of some common items of concern. Department surveyors will continue to look at these items based on current CMS interpretations. If the items are not in compliance with the LSC based upon these interpretations, the items will be identified as deficiencies. Facility staff may presently be aware of these items, or may seek professional consultation to identify such items so that they can proactively address them prior to their next LSC survey. Correcting all of the items identified in this memorandum does not guarantee a deficiency free survey since each facility is designed, operated, and maintained differently. Surveyors will continue to survey for all applicable regulations.

Copies of the Life Safety Code NFPA 101 are available from the National Fire Protection Association (NFPA) at www.nfpa.org, or by contacting NFPA at 1-800-344-3555. The following tags are paraphrased to aid readability, but the code sections referenced should be reviewed in their entirety to ensure a thorough understanding. The LSC survey tags at issue are:

K18: Doors protecting corridor openings in other than required enclosures of vertical openings, exits, or hazardous areas are substantial doors, such as those constructed of 1-¾ inch solid-bonded core wood, or capable of resisting fire for at least 20 minutes. Doors in sprinklered buildings are only required to resist the passage of smoke. LSC reference: 19.3.6.3

• Scenario: The resident room corridor doors have a common gap equal to or larger than 1/8-inch for wood doors, or 3/16-inch for steel doors, between the door and the door frame. Similarly, a wood corridor door has a common overlap of 1/8-inch or larger over its door frame. This measurement is typically taken at resident room corridor doors to ensure these openings if closed will resist the passage of smoke and provide a reasonable barrier between a resident and the threat of smoke inhalation.

K25: Smoke barriers are constructed to provide at least a one-half hour fire resistance rating for existing facilities and one hour for new construction plans approved after 9/11/2003. Pipes, conduits, bus ducts, cables, wires, air ducts, pneumatic tubes, and similar building service equipment that pass through smoke barriers shall be protected. LSC references: 19.3.7.3, 19.3.7.5, 19.1.6.3, and 19.1.6.4

• Scenario: Penetrations through a smoke barrier are not protected with a fire-stopping compound or the existing compound has depreciated. Fire-stopping compounds ensure the integrity of the barrier is continuous, and in the event of a fire, will reasonably ensure that health care staff and residents have some form of safe refuge on one side or the other of the smoke barrier. Typical penetrations arise from new utilities, such as electrical conduit or communication cables, among others.

K29: Hazardous areas shall be enclosed with one hour fire rated construction (with ¾-hour fire-rated doors) or an approved automatic fire extinguishing system. When the approved automatic fire extinguishing system option is used, the areas are separated from other spaces by smoke resisting partitions and doors. Doors are self-closing and non-rated. LSC reference: 19.3.2.1

• Scenario: Combustible storage rooms, greater than 50 square feet, shall be deemed a hazardous room. Typically, the facility is fully sprinkler protected, and these storage rooms require a door closer. Additionally, penetrations within a hazardous room enclosure require the opening to be protected or sealed depending upon the wall construction. Note the period of construction for a facility, for example, 1973 New, 1981 New, 1985 New, and 1991 New could require both automatic sprinkler protection and one-hour fire rated enclosed, depending on the size of the hazardous room.

K38: Delayed-egress locks complying with section 7.2.1.6.1 shall be permitted, provided that not more than one such device is located in any egress path. LSC reference: 19.2.1

7.2.1.6.1 Delayed-Egress Locks. Approved, listed, delayed-egress locks shall be permitted to be installed on doors serving low and ordinary hazard contents in buildings protected throughout by an approved, supervised automatic sprinkler system or an approved, supervised fire detection system provided that the following criteria are met.

(a) The doors shall unlock upon actuation of any approved, supervised automatic sprinkler system or upon the actuation of any heat detector or activation of not more than two smoke detectors of an approved, supervised automatic fire detection system.
(b) The doors shall unlock upon loss of power controlling the lock or locking mechanism.
(c) An irreversible process shall release the lock within 15 seconds upon application of a force to the release device that shall not exceed 15 pounds of force nor be required to be continuously applied for more than 3 seconds. The initiation of the release process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.

(d) On the door adjacent to the release device, there shall be a readily visible, durable sign in letters not less than 1 inch high and not less than 1/8 inch in stroke width on a contrasting background that reads as follows:

PUSH UNTIL ALARM SOUNDS
DOOR CAN BE OPENED IN 15 SECONDS

• Scenario: Two devices are installed within an egress path, or the devices are not working per the requirements found in section 7.2.1.6.1. Typically, the doors will not release and open within 15 seconds, or the doors will lack the proper signage, or the doors will require more than 15 pounds to initiate and open the doors. These unique locking devices are allowed in health care facilities without significant clinical or admission restrictions and provide a needed form of elopement deterrence, but the system must operate in compliance with all of the prescriptive requirements to provide such flexibility.

K46: Emergency lighting of the means of egress, including the exit discharge, is provided and arranged so that failure of any single lighting fixture (bulb) will not leave the area in darkness. LSC reference: 19.2.9.1

• Scenario: Emergency lighting is not provided at each exit discharge or the facility can not substantiate that the emergency lighting is provided. Proper emergency lighting is commonly provided in egress corridors and at exit doors, but exterior exit paths also require illumination to a reasonable distance (40-50 ft) from the structure.

K48: There is a written plan for the protection of all residents and for their evacuation in the event of an emergency. LSC references: 19.7.1.1 and 19.7.2.2

19.7.2.2 A written health care occupancy fire safety plan shall provide for the following:
(1) Use of alarms
(2) Transmission of alarm to fire department
(3) Response to alarms
(4) Isolation of fire
(5) Evacuation of immediate area
(6) Evacuation of smoke compartment
(7) Preparation of floors and building for evacuation
(8) Extinguishment of fire

• Scenario: The written facility evacuation plan does not include all of the items required by 19.7.2.2.; typically missing the smoke compartment evacuation component. Additionally, some fire emergency plans do not identify manual initiation of the building's fire alarm system by staff.

K50: Fire drills are held at unexpected times under varying conditions, at least quarterly on each shift. The staff is familiar with procedures and is aware that drills are part of established routine. Responsibility for planning and conducting drills is assigned only to competent persons who are qualified to exercise leadership. LSC reference: 19.7.1.2

• Scenario: The facility fails to conduct a quarterly fire drill, or, the facility may conduct all of its required drills, but the drills for a given shift occur at approximately the same time. The goal of this regulation is to ensure staff is properly trained on all shifts for the **unexpected** occurrence of a fire.

K51: A fire alarm system with approved devices or equipment installed in accordance with the National Fire Alarm Code NFPA 72 to provide effective warning of fire in any part of the building. Activation of the complete fire alarm system shall be by manual fire alarm initiation, automatic detection or extinguishing system operation. Electronic or written records of tests shall be available. Fire alarm systems shall be maintained periodically and records of maintenance kept readily available. The fire alarm system must provide **automatic** notification to the local fire department through one of the approved methods found in NFPA 72.

• Scenario: The buildings fire alarm system is not connected per NFPA 72. Typical deficiencies result when a fire alarm signal is initiated by the facility, the signal is sent off site to a remote or central monitoring station, and the monitoring station calls the facility back to confirm a fire prior to dispatching emergency forces. CMS emphasized this point in the January 10, 2003 Federal Register adoption of the 2000 edition of NFPA 101. Emergency services are to be notified automatically without delay.

K52: A fire alarm system required for life safety is installed, tested, and maintained in accordance with NFPA 70, the National Electrical Code and NFPA 72, the National Fire Alarm Code. The system has an approved maintenance and testing program complying with the applicable requirements of NFPA 70 and NFPA 72. LSC reference: 9.6.1.4

• Scenario: The facility lacks documentation of conducting quarterly fire alarm testing / inspections. Additionally, the facility may lack smoke detector sensitivity and functional testing. These systems can only provide their intended safety if properly tested and maintained per NFPA 72.

K56: If there is an automatic sprinkler system, it is installed in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems, to provide complete coverage for all portions of the building. The system is properly maintained in accordance with NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems. It is fully supervised. There is a reliable, adequate water supply for the system. Required sprinkler systems are equipped with water flow and tamper switches, which are electrically connected to the building fire alarm system. LSC reference: 19.3.5

• Scenario: The facility lacks documentation of conducting quarterly sprinkler testing/inspections, or if completed, often a report will contain problems; yet the facility failed to correct the problems. Additionally, some systems have unsupervised control valves, have painted or obstructed sprinkler heads, do not have an adequate supply of spare sprinkler heads or do not have a sprinkler wrench readily available. These sprinkler systems are a major contributor to building safety and many trade-offs in the code have been allowed, but only if the system is properly installed, maintained, and inspected.

K69: Cooking facilities are protected in accordance with NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations. LSC reference: 19.3.2.6

• Scenario: The facility has an outdated dry chemical hood extinguishment system. An outdated system has been defined by CMS as one requiring replacement by a UL300 wet chemical if any of the following events occur, (1) the dry chemical has been discharged, (2) the dry chemical has been hydrostatically retested, (3) or new cooking appliances have been installed. Additionally, some new UL300 systems have been installed, yet the new extinguishment system is not connected to the building's fire alarm system, the existing hood has mesh filters, or the existing hood construction has seams that are not liquid-tight.

K76: Compressed gas storage and administration areas shall be protected in accordance with NFPA 99 Standard for Health Care Facilities section 8-3.1.11.2.

(a) Oxygen storage locations of greater than 3,000 cu. ft are enclosed by a one-hour fire resistance barrier.
(b) Oxygen storage locations less than 3,000 cu. ft.
    1. A minimum distance of 20 ft. from combustibles or incompatible materials in a non-sprinkler protected oxygen storage room, or
    2. A minimum distance of 5 ft. from combustible or incompatible materials in a fully sprinkler protected oxygen storage room.

• Scenario: Oxygen storage, in a fully sprinkler building is found within five feet of combustibles. Additionally, oxygen bottles are not secured or full and empty bottles are not adequately separated.

K143: Liquid oxygen transferring shall be:
(a) separated from any portion of a facility wherein residents are housed, examined, or treated by a separation of a fire barrier of 1-hour fire-resistance construction. Note the fire rated door to this room shall be in the closed position while transferring so residents are not exposed to this hazard; and
(b) the area or room formed by the fire barrier is served by functioning mechanical ventilation, and
(c) the area or room formed by the fire barrier is fully sprinkler protected, and
(d) the area or room formed by the fire barrier has a ceramic or concrete floor, and
(e) the area or room formed by the fire barrier is posted with signs indicating that transferring is occurring, and that smoking in the immediate area is not permitted, and
(f) combustible or incompatible materials are a minimum of 5 feet distance from the transferring operation, and
(g) ignition sources are a minimum of 5 feet distance from the transferring operation.

Source: Health Care Facilities standard NFPA 99 section 8-6.2.5.2 and Compressed Gas Association (CGA) Pamphlet P-2.6 and P-2.7.

• Scenario: Noncompliance with any item listed above.

K144: Generators are tested monthly and exercised under load for 30 minutes per month in accordance with NFPA 110 section 6-4.2 or the generators are tested annually under a four hour load bank test in accordance with NFPA 110 section 6-4.2.2.

• Scenario: The emergency generator is tested for a full 30 minutes, but not under a 30% nameplate loading. Additionally, an emergency generator located in a building, does not have task lighting to illuminate the work area around the generator in the event a normal power outage occurs. Lastly, for systems on natural or synthetic gas, the facility lacks substantiation that the supply is reliable, for example, a non-interruptible agreement.

K154/K155: Where a required sprinkler system or fire alarm system is out of service for more than 4 hours in a 24-hour period, the authority having jurisdiction shall be notified, and the building shall be evacuated or an approved fire watch system shall be provided for all parties left unprotected by the shutdown until the sprinkler/fire alarm system has been returned to service. 9.7.6.1, 9.6.1.8

• Scenario: The facility has a sprinkler or fire alarm system outage and does not have a fire watch policy and procedure.

Summary:
As stated above, compliance with the above listed K-tags does not constitute a deficiency-free survey. This memorandum is motivated by the mutual concern of the Department and facilities for compliance with the requirements, and to maximize safety for all residents. All LSC tags are subject to review at each survey. If you have any questions, the following resources are available:

Long Term Care Facilities:

- **Eau Claire Region (WRO):** Joe Bronner	(715) 836-4753
- **Green Bay Region (NERO):** Interim	(920) 448-5249
- **Madison Region (SRO):** Interim	(608) 243-2374
- **Milwaukee Region (SERO):** Katherine Friend	(414) 227-4908
- **Rhinelander Region (NRO):** Joanne Powell	(715) 365-2802

Non-Long Term Care Facilities:

- **Northern Region (WRO, NRO, NERO):** Jan Heimbruch	(608) 243-2086
- **Southern Region (SERO, SRO):** Interim	(414) 227-4556